12 March 2014 - Natural England's long term monitoring project - which monitors the effects of climate change and air pollution on biodiversity - is getting plugged straight into the Met Office.

The Met Office is joining forces with Natural England and using its meteorological expertise to bring its Long-term Monitoring Network (LTMN) into the 21st century. Natural England use their LTMN to help measure the effects of climate change, air pollution and land management on the natural environment. Understanding these effects can help Natural England give the best advice on mitigating or adapting to long-term environmental changes. At present the network has 32 monitoring stations, mostly on National Nature Reserves and sometimes in very remote locations. Weather data comes from a network of 16 weather stations, and is retrieved monthly, meaning any equipment faults can take a long time to discover and lead to gaps in data and therefore our understanding.

Under the new partnership, the Met Office will upgrade all the existing weather stations with new communications equipment, and install new ones at up to 13 further sites. We will connect the stations to our Meteorological Monitoring System (MMS), using the mobile 'phone network This means that the data will be routinely sent to the Met Office's Exeter headquarters, and checked daily for quality, which will allow problems to be detected, reported and dealt with quickly. In return, we will be able to use data from Natural England stations to validate its weather forecasts.

In addition to its own weather stations, Natural England will be able to use data from the Met Office's network of weather stations, reducing the number of weather stations Natural England needs to operate directly. The weather data will also be made available directly to the public through the Met Office's WOW portal.

Jim Trice, Met Office Land Networks Manager said: "Working in partnership with organisations such as Natural England helps the Met Office develop, improve and refine the services we provide. The Met Office uses a vast array of weather data gathered from a number of sources including weather stations across the UK. The data from Natural England's LTMN will make a valuable contribution to the Met Office's ability to accurately monitor and provide weather advice."

Tim Hill, Natural England's Chief Scientist said: "This new partnership gives us clearer data more frequently over an extended network of stations. That expanded capacity gives us a better picture of how the natural environment is responding to long-term changes, and at the same time simplifies the management of the network."

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